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Patent and Trademark OfficeAttorney Docket  
2003946-0148  
(PITA/US)In re Application No.  
Not Yet Assigned

10/501120

**INFORMATION  
DISCLOSURE STATEMENT**  
(Use several sheets if necessary)Applicant: Agoulnik *et al*Filing Date:  
January 8, 2004Group:  
NYA**U.S. PATENT DOCUMENTS**

| Examiner's<br>Initials | U.S. Patent No. | Applicant       | Issue Date        | Class | Subclass |
|------------------------|-----------------|-----------------|-------------------|-------|----------|
| B/D                    | † 4,990,448     | Konishi, et al. | February 5, 1991  | 435   | 106      |
| B/D                    | † 5,071,957     | Konishi, et al  | December 10, 1991 | 530   | 330      |

**U.S. PATENT APPLICATIONS**

| Examiner's<br>Initials: | Serial Number: | Applicant: | Filing Date: | Group: | Art Unit: |
|-------------------------|----------------|------------|--------------|--------|-----------|
|                         |                |            |              |        |           |

**FOREIGN PATENT DOCUMENTS**

| Examiner's<br>Initials | Document No.    | Country | International Publication<br>Date | Translation |    |
|------------------------|-----------------|---------|-----------------------------------|-------------|----|
|                        |                 |         |                                   | Yes         | No |
| B/D                    | EP 0 332 080 B1 | EP      | September 13, 1989                |             |    |
| B/D                    | EP 0 411 660 A1 | EP      | February 6, 1991                  |             |    |
| B/D                    | JP 3-197492     | JP      | August 28, 1991                   |             | X  |
| B/D                    | JP 5-286955     | JP      | November 2, 1993                  |             | X  |
| B/D                    | WO 95/24914     | PCT     | September 21, 1995                |             |    |
| B/D                    | WO 96/13266     | PCT     | May 9, 1996                       |             |    |
| B/D                    | WO 02/096933    | PCT     | December 5, 2002                  |             |    |
| B/D                    | WO 03/033506 A1 | PCT     | April 24, 2003                    |             | X  |

**OTHER DOCUMENTS**

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| B/D                    | Adams, et al., "Proteasome Inhibitors: A Novel Class of Potent and Effective Antitumor Agents", <i>Cancer Research</i> , 59: 2615-2622, 1999.   |
| B/D                    | Elofsson, et al., "Towards subunit-specific proteasome inhibitors: synthesis and evaluation of peptide $\alpha'$ , $\beta'$ -epoxyketones, <i>Chemistry &amp; Biology</i> , 6(11): 811-822, 1999.             |
| B/D                    | Gardner, et al., "Characterization of peptidyl boronic acid inhibitors of mammalian 20 S and 26 S proteasomes and their inhibition of proteasomes in cultured cells", <i>Biochem J.</i> , 346: 447-454, 2000. |
| B/D                    | Harding, et al., "Novel Dipeptide Aldehydes Are Proteasome Inhibitors and Block the MHC-I Antigen-Processing Pathway <sup>1</sup> ", <i>The Journal of Immunology</i> , 155(4):1767-75, 1995.                 |

† Copies of references not included – requirement waived pursuant to USPTO OG Notice of 8/5/03

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| Form PTO-1449<br>(REV. 8-03)  | U.S. Department of Commerce<br>Patent and Trademark Office  | Attorney Docket<br>2003946-0148<br>(PITA/US) | In re Application No.<br>Not Yet Assigned<br><b>10/501120</b> |
| <b>INFORMATION</b><br><b>DISCLOSURE STATEMENT</b><br>(Use several sheets if necessary)  |   | Applicant: AgoulNIK <i>et al</i>             |   |
|   |   | Filing Date:<br>January 8, 2004              | Group:<br>NYA   |
| BM  | Iqbal, et al., "Potent $\alpha$ -Ketocarboxyl and Boronic Ester Derived Inhibitors of Proteasome", <i>Bioorganic &amp; Medicinal Chemistry Letters</i> , 6(3): 287-90, 1996.  |  |   |
| H1  | Momose, et al., "Tyropeptins A and B, New Proteasome Inhibitors Produced by <i>Kitasatospora</i> sp. MK993-dF2. I. Taxonomy, Isolation, Physico-chemical Properties and Biological Activities", <i>Journal of Antibiotics</i> , 54(12): 997-1003, 2001.                             |  |   |
| B3  | Sin, et al., "Total Synthesis of the Potent Proteasome Inhibitor Epoxomicin: A Useful Tool For Understanding Proteasome Biology", <i>Bioorganic &amp; Medicinal Chemistry Letters</i> , 9(15): 2283-2288, 1999.   |  |   |
| H1  | Sun, et al., "CEP1612, a Dipeptidyl Proteasome Inhibitor, Induces p21 <sup>WAF1</sup> and p27 <sup>KIP1</sup> Expression and Apoptosis and Inhibits the Growth of the Human Lung Adenocarcinoma A-549 in Nude Mice <sup>1</sup> ", <i>Cancer Research</i> , 61(4): 1280-1284, 2001. |  |   |
| EXAMINER  |   | DATE CONSIDERED 9-26-2007                    |   |
| EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. |   |  |   |

† Copies of references not included – requirement waived pursuant to USPTO OG Notice of 8/5/03

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|---|---|--|-----------------------------------|--|-----------|--|--|---------------|--|
| <b>Form PTO-1449</b><br><b>(REV. 8-03)</b>  |   | U.S. Department of Commerce<br>Patent and Trademark Office |                                   | Attorney Docket<br>2003946-0148<br>(PITA/US) |           | In re Application<br>No.<br>10/501,120 |  |               |  |
| <b>SUPPLEMENTAL INFORMATION</b><br><b>DISCLOSURE STATEMENT</b><br><i>(Use several sheets if necessary)</i>  |   |  |                                   | Applicant: AgoulNIK <i>et al</i>             |           | Filing Date:<br>July 8, 2004           |  | Group:<br>NYA |  |
| <b>U.S. PATENT DOCUMENTS</b>  |   |  |                                   |  |           |  |  |               |  |
| Examiner's<br>Initials  | U.S. Patent No.   | Applicant  | Issue Date                        | Class  | Subclass  |  |  |               |  |
|   |   |  |                                   |  |           |  |  |               |  |
| <b>U.S. PATENT APPLICATIONS</b>   |   |  |                                   |  |           |  |  |               |  |
| Examiner's<br>Initials:   | Serial Number:  | Applicant:   | Filing Date:                      | Group:                                       | Art Unit: |  |  |               |  |
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| <b>FOREIGN PATENT DOCUMENTS</b>   |   |  |                                   |  |           |  |  |               |  |
| Examiner's<br>Initials  | Document No.  | Country  | International Publication<br>Date | Translation                                  |           |  |  |               |  |
|   |   |  |                                   |  |           |  |  |               |  |
|   |   |  |                                   | Yes      No                                  |           |  |  |               |  |
| <b>OTHER DOCUMENTS</b>  |   |  |                                   |  |           |  |  |               |  |
| Examiner's<br>Initials  | Citation (Including Author, Title, Date, Pertinent Pages, Etc.)   |  |                                   |  |           |  |  |               |  |
| BD ✓  | Hanada, et al., "Epoxomicin. A New Antitumor Agent Of Microbial Origin", <i>Journal of Antibiotics</i> , 45 (11): 1746-1752, 1992.  |  |                                   |  |           |  |  |               |  |
| BZ ✓  | Koguchi, et al., "TMC-86A, B and TMC-96, New Proteasome Inhibitors from <i>Streptomyces</i> sp. TC 1084 and <i>Saccharothrix</i> sp. TC 1094 II. Physico-chemical Properties and Structure Determination", <i>Journal of Antibiotics</i> , 53 (1): 63-65, 2000. |  |                                   |  |           |  |  |               |  |
| BZ ✓  | Koguchi, et al., "TMC-89A and B, New Proteasome Inhibitors from <i>Streptomyces</i> sp. TC 1087", <i>Journal of Antibiotics</i> , 53 (9): 967-972, 2000.  |  |                                   |  |           |  |  |               |  |
| BZ ✓  | Meng, et al., "Eponemycin Exerts Its Antitumor Effect through the Inhibition of Proteasome Function <sup>1</sup> ", <i>Cancer Research</i> , 59: 2798-2801, 1999.   |  |                                   |  |           |  |  |               |  |
| BZ ✓  | Meng, et al., "Epoxomicin, a potent and selective proteasome inhibitor, exhibits <i>in vivo</i> antiinflammatory activity", <i>Proc. Natl. Acad. Sci. USA</i> , 96: 10403-10408, 1999.  |  |                                   |  |           |  |  |               |  |
| BZ ✓  | Myung, et al., "The Ubiquitin-Proteasome Pathway and Proteasome Inhibitors", <i>Medicinal Research Reviews</i> , 21 (4): 245-273, 2001.   |  |                                   |  |           |  |  |               |  |
| BZ ✓  | Sugawara, et al., "Eponemycin <sup>1</sup> A New Antibiotic Active Against B16 Melanoma I. Production, Isolation, Structure And Biological Activity", <i>Journal of Antibiotics</i> , XLIII (1): 8-18, 1990.  |  |                                   |  |           |  |  |               |  |
| <b>EXAMINER</b>   |   |  | BZ Dantz                          |  |           | <b>DATE CONSIDERED</b> 9/26/07         |  |               |  |
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